



10-647649.ST25  
SEQUENCE LISTING

<110> individual  
Chin, Chao-Ying  
<120> A NOVEL NUCLEIC ACID ENCODING BETA-1,3-GLUCANASE FROM LILY  
<130> 1758-000001/US  
<140> 10/647,649  
<141> 2003-08-26  
<160> 3  
<170> PatentIn version 3.2  
<210> 1  
<211> 337  
<212> PRT  
<213> Lily  
<400> 1

Met Ala Ala Gln His Ile Ile Ser Met Ala Ala Met Ala Ser Leu Leu  
1 5 10 15

Val Val Leu Ser Ala Ile Pro Arg Gly Val Glu Ser Ile Gly Val Cys  
20 25 30

Asn Gly Met Asp Gly Asp Asn Leu Pro Gln Pro Ala Asp Val Val Asn  
35 40 45

Leu Tyr Lys Ser Asn Asn Ile Ala Gly Met Arg Leu Tyr Ser Pro Asp  
50 55 60

Gln Ala Thr Leu Gln Ala Leu Gln Gly Ser Asn Ile Tyr Leu Ile Leu  
65 70 75 80

Asp Val Pro Asn Ser Asp Leu Gln Asn Ile Ala Ser Asp Gln Ser Ala  
85 90 95

Ala Thr Asn Trp Val Gln Thr Asn Val Gln Ala Tyr Pro Asn Val Ala  
100 105 110

Phe Arg Tyr Ile Ala Val Gly Asn Glu Val Ile Pro Gly Gly Gln Ala  
115 120 125

Gln Tyr Val Leu Pro Ala Met Asn Asn Ile Gln Ser Ala Leu Ser Ser  
130 135 140

Ala Gly Leu Gln Asn Ile Lys Val Ser Thr Ser Val Ser Phe Gly Val  
145 150 155 160

10-647649.ST25

Val Gly Thr Ser Tyr Pro Pro Ser Ala Gly Ser Phe Ser Ser Asp Ala  
165 170 175

Ser Ser Thr Leu Gly Pro Ile Ile Gln Phe Leu Ala Ser Asn Gly Ser  
180 185 190

Pro Leu Leu Ala Asn Ile Tyr Pro Tyr Leu Ser Tyr Ala Gly Asn Ser  
195 200 205

Gly Ser Ile Asp Leu Ser Tyr Ala Leu Phe Thr Ala Ser Gly Thr Val  
210 215 220

Val Gln Asp Gly Ser Tyr Ala Tyr Asn Asn Leu Phe Asp Ala Met Val  
225 230 235 240

Asp Ala Leu Tyr Ser Ala Leu Glu Ser Ala Gly Gly Pro Asn Val Pro  
245 250 255

Val Val Val Ser Glu Ser Gly Trp Pro Ser Ala Gly Gly Thr Ala Ala  
260 265 270

Thr Val Ser Asn Ala Gln Thr Tyr Asn Ser Asn Leu Ile Asn His Val  
275 280 285

Gly Gln Gly Thr Pro Lys Arg Pro Gly Ala Ile Glu Thr Tyr Ile Phe  
290 295 300

Ala Met Phe Asn Glu Asp Gln Lys Gln Pro Gln Gly Ile Glu Asn Asn  
305 310 315 320

Phe Gly Leu Phe Tyr Pro Asn Glu Gln Pro Val Tyr Ser Ile Ser Phe  
325 330 335

Thr

<210> 2  
<211> 1125  
<212> DNA  
<213> Lily

<400> 2  
ttcatggcag ctcagcacat catctccatg gctgccatgg catccctcct tgtagtactc 60  
tcggcaatcc cgagaggcgt ggaatccatt ggggtctgca atggaatgga cggtgacaac 120  
ctccccagc ccgccgacgt cgtcaacctc tacaagtcca acaacatagc tggcatgcca 180  
ctctacagcc ccgaccaagc cactctccag gccctccagg gctctaakat ctacctcatc 240  
ctcgacgtcc ccaactccga cctccaaaac attgcctccg accaatccgc cgccaccaac 300

10-647649.ST25

tggggtccaaa ccaacgtcca agcctaccca aacgttgcct tccgatacat cgccgtcgga	360
aacgaagtca tccccggcgg ccaagctcag tacgtcctcc cagccatgaa caacatacag	420
tccgcccctct cctctgccgg ccttcagaac atcaaggtct ccacatcagt ctccttcggc	480
gtcgtcggtta cctcatatcc cccctcagct ggctccttct cttccgatgc atcgtcgaca	540
ttgggtccaa tcatacagtt tctagccagc aatgggtccc cattacttgc caacatctac	600
ccctacttga gctatgctgg caactccgga tccatcgacc tctcatacgc cctctttact	660
gcatctggta cagtcgtaca ggacgggtcc tacgcttaca acaacctctt cgatgccatg	720
gtcgacgcat tgtactcggc cctggagagc gccggagggc cgaatgtccc tgttgtcgtg	780
tcggagagtg gctggccgtc agcgggcggg acagcggcga cgggtgtctaa tgcgcagact	840
tacaattcca atttgatcaa ccatgtgggt caggggacgc cgaagaggcc aggggcgatt	900
gagacctaca tatttgccat gttcaacgag gatcagaagc agccgcaagg gattgagaat	960
aactttgggc tgttttacct taacgaacag cctgtctatt cgatcagctt cacttgagaa	1020
atttgatcag atgaaatata aataaaaggt cttatattgt aaggcaaagc tcgtaattga	1080
tagccatcta gtaatatagc tccggctaata taaaactata aaata	1125

<210> 3  
 <211> 16  
 <212> PRT  
 <213> Lily

<400> 3

Met	Asp	Gly	Asp	Asn	Leu	Pro	Gln	Pro	Ala	Asp	Val	Val	Asn	Leu	Tyr
1				5				10					15		